

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: WADLEY FALLS	Lake Area (ha): 8.09
Town: LEE	Maximum depth (m): 0.6
County: Strafford	Mean depth (m): 0.3
River Basin: Coastal	Volume (m <sup>3</sup> ): 22000
Latitude: 43°05'29" N	Relative depth: 0.2
Longitude: 71°00'32" W	Shore configuration: ---
Elevation (ft): 80	Areal water load (m/yr): ---
Shore length (m): 1200	Flushing rate (yr <sup>-1</sup> ): ---
Watershed area (ha): ---	P retention coeff.: ---
% watershed ponded: ---	Lake type: artificial

BIOLOGICAL:

13 February 1996

3 August 1995

DOM. PHYTOPLANKTON (% TOTAL)	#1	NO PHYTOPLANKTON	NO NET PHYTOPLANKTON
	#2	SAMPLE COLLECTED	SAMPLES COLLECTED
	#3		
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			29.98
DOM. ZOOPLANKTON (% TOTAL)	#1	NO ZOOPLANKTON	NO NET ZOOPLANKTON
	#2	SAMPLE COLLECTED	SAMPLES COLLECTED
	#3		
ROTIFERS/LITER			
MICROCRUSTACEA/LITER			
ZOOPLANKTON ABUNDANCE (#/L)			
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			0.5 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		13.7	7.4
BACTERIA (E. coli, #/100 ml)	#1		10
	#2		25
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**

Lake: WADLEY FALLS

Town: LEE

	13 February 1996		3 August 1995		
DEPTH (m)	1.0		0.5		
pH (units)	6.1		6.8		
A.N.C. (Alkalinity)	6.0		18.4		
NITRATE NITROGEN	0.23		< 0.10		
TOTAL KJELDAHL NITROGEN	0.20		0.65		
TOTAL PHOSPHORUS	0.014		0.031		
CONDUCTIVITY ( $\mu\text{mhos/cm}$ )	107.2		159.5		
APPARENT COLOR (cpu)	50		65		
MAGNESIUM			1.62		
CALCIUM			7.8		
SODIUM			19.2		
POTASSIUM			1.61		
CHLORIDE	22		37		
SULFATE			4		
TN : TP	31		21		
CALCITE SATURATION INDEX			2.3		

All results in mg/L unless indicated otherwise

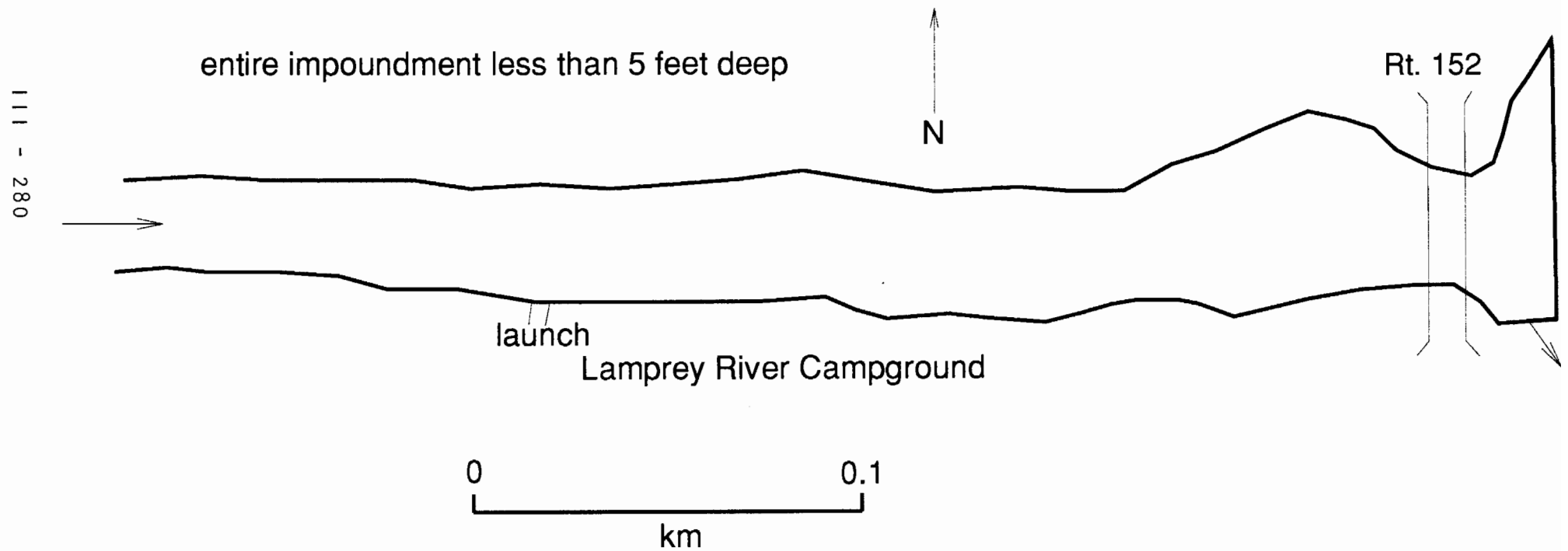
**TROPHIC CLASSIFICATION: 1995**

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	4	1	5	10	Eutro.

**COMMENTS:**

1. This is an artificial impoundment on the Lamprey River. It was surveyed at the request of the Surface Water Quality Bureau, but is not considered to be a pond. It is a run-of-the-river type impoundment that was less than a meter deep.
2. Net plankton samples were not collected (too shallow) but the chlorophyll level was relatively high. Filamentous green algae were common along the bottom and clumps of algae were observed floating in the water (perhaps fragments of filamentous algae).
3. Trophic points for secchi disk transparency are misleading because the disk was visible on bottom at 0.5 meters. A trophic rating of mesotrophic may be more accurate for this impoundment.
4. Lamprey River Campground was located along the southern shore of the impoundment. Canoe was launched from this area.
5. The watershed area was not determined and related morphometric data were not calculated.

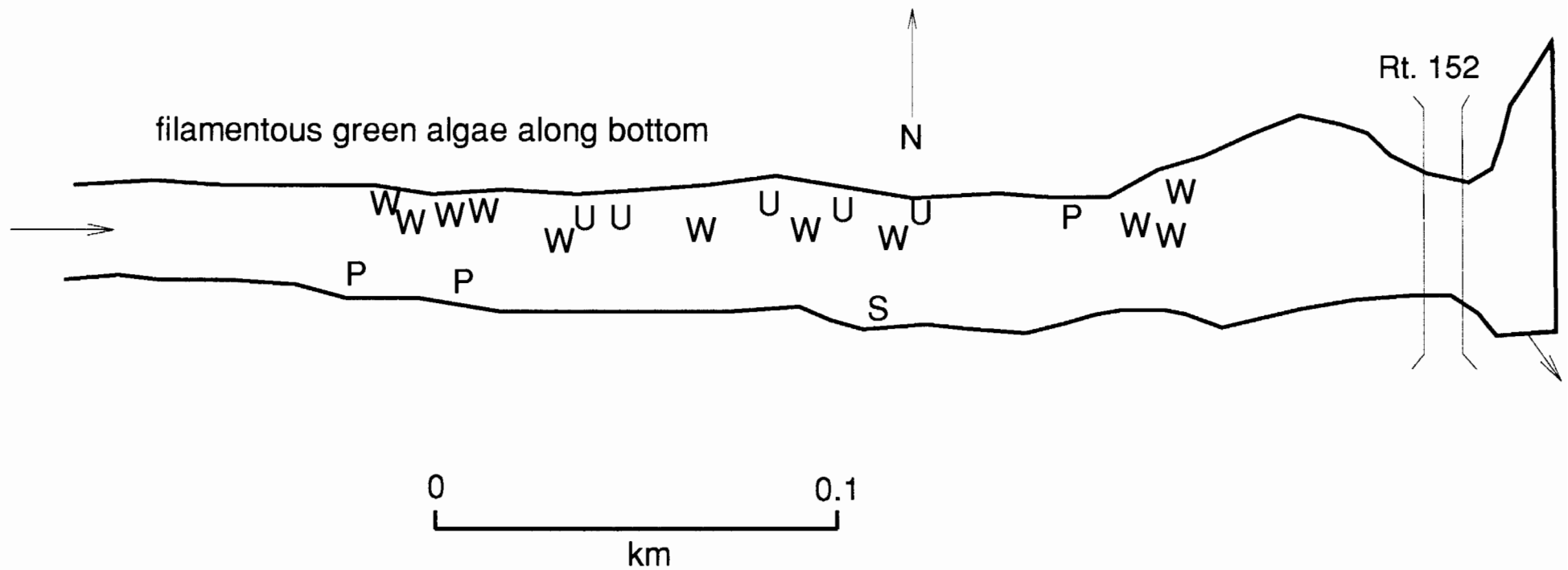
# Wadley Falls Lee



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# Wadley Falls

## Lee



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